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**United States Patent** [19]  
**Jennings**

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[54] **MULTIPLE LANGUAGE CAPABILITY IN AN  
INTERACTIVE SYSTEM**

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[52] **U.S. Cl.** ..... 379/88; 379/67; 379/89; 364/419.01; 364/419.02; 381/51; 434/157; 434/185

[58] **Field of Search** ..... 379/88, 89, 67; 364/419.01, 419.02, 419.05, 419.08, 419.16; 434/157, 156, 185, 307, 308; 381/43, 51; 340/721

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[57] **ABSTRACT**

The data entry portion of a voice messaging system is constructed to be language, culture, or market segment independent. In particular, the design of the voice messaging system is based upon "semantic expressions," which are used to evaluate any language, culture, or market specific data that is entered by a user. In particular, each type of data entry is treated as a "semantic expression" having an identifier. This identifier is mapped into a plurality of rules, each rule providing instructions on how to interpret the input data for a particular language, culture, or market segment. The rules can recursively call other rules to provide additional flexibility in interpreting information that is entered by a user.

10 Claims, 4 Drawing Sheets

